

What is claimed

1. A vacuum cleaner, comprising:
 - a housing;
 - a nozzle inlet;
 - a suction generator carried on said housing;
 - 5 a dirt cup carried on said housing, said dirt cup a dirt collection chamber, an inlet and an open end;
 - a filter assembly including a filter housing defining a filter chamber, said filter housing and filter chamber mating with said open end of said dirt cup; and
 - 10 a filter element held in said filter chamber in said filter housing.
2. The vacuum cleaner of claim 1 wherein said filter housing includes a base, a sidewall and a top.
3. The vacuum cleaner of claim 2 wherein said base includes an inlet opening in fluid communication with said open end of said dirt cup.

4. The vacuum cleaner of claim 3, wherein at least one exhaust vent opening is provided in one of said sidewall and said top of said filter housing.
5. The vacuum cleaner of claim 4, wherein said filter assembly further includes a ribbed filter support.
6. The vacuum cleaner of claim 5, wherein said ribbed filter support includes a concavity for receiving said filter element.
7. The vacuum cleaner of claim 6, wherein said concavity is open towards said inlet opening in said base.
8. The vacuum cleaner of claim 8, wherein said filter element is concave to match said concavity of said filter support.
9. The vacuum cleaner of claim 8, wherein said filter element is formed from filter paper.
10. The vacuum cleaner of claim 9, wherein said filter element has a surface area A_1 greater than a surface area A_2 of said inlet opening and greater than a surface area A_3 of said open end of said dirt cup.
11. The vacuum cleaner of claim 3, further including a filter screen held by said base across said inlet opening.

12. The vacuum cleaner of claim 1, wherein said dirt collection chamber is substantially cylindrical in shape.

13. The vacuum cleaner of claim 12, wherein said inlet is tangentially directed with respect to a sidewall of said dirt collection chamber.

14. The vacuum cleaner of claim 13, wherein said filter element is frustoconical in shape.

15. The vacuum cleaner of claim 14, wherein said housing includes a nozzle section including said nozzle inlet and a canister section.

16. The vacuum cleaner of claim 15, wherein said nozzle section and canister section are pivotally connected together.